c) the molar ratio of total ester reactant to each esterifiable hydroxy group of the polyol in the reaction mixture ranges from about 0.9:1 to about 1.2:1;

d) the temperature in the initial stage of the process ranges from about 130°C to about 140°C, and in the final stages of the process ranges from about 80°C to about 120°C; [,] and

H1 Cont

e) easily removable alcohol is removed from the reaction mixture as the interesterifying reaction proceeds; and

wherein the initial stage of the interesterifying reaction is carried out in a continuous manner under conditions of backmixing suitable for maintaining within said reaction mixture a level of lower partial fatty acid esters of said polyol that is sufficient to emulsify said reaction mixture

[said process utilizes one or more of the following features:

(1) the polyol is a particulate solid that has had its particle size reduced by mechanical size reduction to a particle size of less than about 100 microns;

(2) after the degree of esterification is greater than about 60%, and the soap is insoluble in the reaction mixture, the soap is removed from the reaction mixture by filtration or centrifugation in a continuous process;

(3) unreacted polyol having particle sizes above about one micron is removed, before any soap that is present becomes insoluble, in a continuous process;

(4) said easily removable alcohol is a volatile alcohol, the pressure above the reaction mixture in the final stages of the interesterifying reaction is maintained at from about 15 to about 300 mm Hg and the removal of the volatile alcohol is assisted by increasing the mass transfer area of the reaction mixture;

(5) the initial stage of the interesterifying reaction is carried out in a continuous manner under conditions of backmixing suitable for maintaining within said reaction mixture a level of lower partial fatty acid esters of said polyol that is sufficient to emulsify said reaction mixture;

(6) at least the final stage of the interesterifying reaction is carried out in a continuous manner under conditions approaching plug-flow conditions after the degree of esterification of said polyol has reached at least about 50%].

H1 cont

Claim 13, line 1, replace "claim 10" with --claim 1--.

Claim 23, line 1, replace "claim 22" with --claim 1--.

Claim 30, line 1, replace "claim 29" with --claim 62--.

Claim 43, line 1, replace "claim 42" with --claim 62--.

Claim 51, line 1, replace "claim 50" with --claim 48--.

Please add the following new claims 79-118:

H2

--79. A process according to claim 63, wherein the partial vapor pressure of the volatile alcohol in the initial reaction stage is less than 100 mm Hg. --

--80. A process according to claim 79, wherein the partial vapor pressure of the volatile alcohol is maintained by sparging with an inert gas.--

--81. A process according to claim 63, wherein the one or more subsequent reaction zones are provided in a tray reactor.--

H2 Cont

--82. A process according to claim 63, wherein the emulsifier is used in the initial reaction stage in an amount of from about 3% to about 11% by weight of the reactants.--

--83. A process according to claim 63, wherein the initial reaction stage is carried out in a continuous reaction vessel having stirring means.--

--84. A process according to claim 83, wherein in the initial reaction stage the stirring means applies agitation to ensure thorough mixing of the reaction components.--

--85. A process according to claim 63, wherein the initial reaction stage is carried out in a continuous stirred tank reactor.--

--86. A process according to claim 63, wherein the steady-state reaction mixture in the first zone is capable of solubilizing the polyol.--

--87. A process according to claim 63, wherein the final degree of esterification is 95% or more.--

--88. A process according to claim 63, wherein the final degree of esterification is 98% or more.--

H2 cont

--89. A process for the synthesis of polyol fatty-acid polyesters by reacting a polyol and a fatty-acid lower-alkyl ester of a volatile C_1-C_4 alcohol under substantially solvent free conditions in the presence of a catalyst and an emulsifier, the process comprising:

an initial reaction stage which is carried out under such conditions that the reaction mixture in said initial stage is in steady-state, with continuous introduction of reactants comprising polyol and fatty-acid lower-alkyl ester, and continuous removal of products comprising reaction mixture having a degree of esterification of about 10% or more and volatile alcohol formed during the initial reaction stage, and

one or more subsequent reaction stages in which the reaction mixture from said initial stage is further reacted to said polyol fatty-acid polyesters.--

--90. A process according to claim 89, wherein the fatty-acid lower-alkyl ester is a fatty-acid methyl ester.--

--91. A process according to claim 89, wherein there is one in-going reactant stream in the initial stage.--

--92. A process according to claim 89, wherein the emulsifier is used in the initial reaction stage in an amount of from about 3% to about 11% by weight of the reactants.--

--93. A process for the synthesis of polyol fatty-acid polyesters by reacting a polyol and a fatty-acid lower-alkyl ester under substantially solvent free conditions in the presence of a catalyst selected from the group consisting of alkali metals, alloys of two or more alkali metals, alkali metal hydrides, alkali metal alkoxides, potassium carbonate, sodium carbonate, barium carbonate, potassium hydroxide and mixtures thereof, and an emulsifier, the process comprising:

H2 Cont

an initial reaction stage which is carried out under such conditions that the reaction mixture in said initial stage is in steady-state, with continuous introduction of reactants comprising polyol and fatty-acid lower-alkyl ester, and continuous removal of products comprising reaction mixture having a degree of esterification of about 10% or more and volatile alcohol formed during the initial reaction stage, and

one or more subsequent reaction stages in which the reaction mixture from said initial stage is further reacted to said polyol fatty-acid polyesters.--

--94. A process according to claim 93, wherein the fatty-acid lower-alkyl ester is an ester of a volatile C_1-C_4 alcohol.--

--95. A process according to claim 93, wherein the catalyst is selected from the group consisting of sodium carbonate, potassium carbonate, potassium hydroxide and mixtures thereof.--

--96. A process according to claim 63, wherein the fatty-acid lower-alkyl ester is an ester of a volatile C_1-C_4 alcohol.--

--97. A process according to claim 96, wherein the catalyst is selected from the group consisting of alkali metals, alloys of two or more alkali metals, alkali metal hydrides, alkali metal alkoxides, potassium carbonate, sodium carbonate, barium carbonate, potassium hydroxide and mixtures thereof.--

H2 cont

--98. A process according to claim 97, wherein the molar ratio of fatty-acid lower-alkyl ester to esterifiable sites on the polyol is from about 0.9:1 to about 1.4:1.--

--99. A process according to claim 97, wherein soap is used in the initial reaction stage in an amount of from about 3% to about 11% by weight of the reactants.--

--100. A process according to claim 97, wherein the emulsifier introduced into the initial reaction stage is soap.--

--101. A process according to claim 100, wherein the polyol is sucrose and reaction mixture product from the initial stage comprises not more than 4.2% unreacted sucrose.--

--102. A process according to claim 101, wherein the initial reaction stage temperature is in the range of from about 130°C to about 140°C.--

--103. A process according to claim 102, wherein the initial reaction stage is carried out in a continuous stirred tank reactor.--

--104. A process according to claim 102, wherein the initial reaction stage is carried out in a continuous reaction vessel having stirring means.--

--105. A process according to claim 96, wherein the catalyst is selected from the group consisting of sodium carbonate, potassium carbonate, potassium hydroxide and mixtures thereof.--

H2 cont

--106. A process according to claim 96, wherein in the initial reaction stage the degree of esterification is between about 10% and about 70%.--

--107. A process according to claim 63, wherein the initial reaction stage is carried out in a continuous stirred reaction vessel having stirring means, wherein in the initial reaction stage the degree of esterification is between about 10% and about 70%, and wherein the fatty-acid lower-alkyl ester is an ester of a volatile C_1-C_4 alcohol.--

--108. A process according to claim 107, wherein in the initial reaction stage the stirring means applies agitation to ensure thorough mixing of the reaction components.--

--109. A process according to claim 108, wherein the initial reaction stage temperature is in the range of from about 130°C to about 140°C.--

--110. A process according to claim 85, wherein the fatty-acid lower-alkyl ester is an ester of volatile C_1-C_4 alcohol.--

--111. A process according to claim 110, wherein the catalyst is selected from the group consisting of alkali metals, alloys of two or more alkali metals, alkali metal hydrides, alkali metal alkoxides, potassium carbonate, sodium carbonate, barium carbonate, potassium hydroxide and mixtures thereof.--

H2 cont

--112. A process according to claim 111, wherein the initial reaction stage temperature is in the range of from about 130°C to about 140°C.--

--113. A process according to claim 112, wherein the emulsifier is soap.--

--114. A process for the synthesis of polyol fatty-acid polyesters by reacting a polyol and a fatty-acid lower-alkyl ester under substantially solvent free conditions in the presence of a catalyst selected from the group consisting of alkali metals, alloys of two or more alkali metals, alkali metal hydrides, alkali metal alkoxides, potassium carbonate, sodium carbonate, barium carbonate, potassium hydroxide and mixtures thereof, and an emulsifier, the process comprising:

an initial reaction stage wherein the temperature is in the range of from about 130°C to about 140°C, which is carried out under such conditions that the reaction mixture in said initial stage is in steady-state, with continuous introduction of reactants comprising polyol and fatty-acid lower-

alkyl ester, and continuous removal of products comprising reaction mixture having a degree of esterification of about 10% or more and volatile alcohol formed during the initial reaction stage, and

one or more subsequent reaction stages in which the reaction mixture from said initial stage is further reacted to said polyol fatty-acid polyesters.--

--115. A process according to claim 114, wherein the emulsifier is used in the initial reaction stage in an amount of from about 3% to about 11% by weight of the reactants.--

H2 cont

--116. A process for the synthesis of polyol fatty-acid polyesters by reacting a polyol and a fatty-acid lower-alkyl ester under substantially solvent free conditions in the presence of a catalyst and an emulsifier, the process comprising:

an initial reaction stage which is carried out under such conditions that the reaction mixture in said initial stage is in steady-state, with continuous introduction of reactants comprising polyol and fatty-acid lower-alkyl ester, and continuous removal of products comprising reaction mixture having a degree of esterification of about 10% or more and volatile alcohol formed during the initial reaction stage, and

one or more subsequent reaction stages in which the reaction mixture from said initial stage is further reacted to said polyol fatty-acid polyesters;

wherein the conditions in the initial reaction stage provide a stable heterogeneous reaction mixture.--

--117. A process for the synthesis of polyol fatty-acid polyesters by reacting a polyol and a fatty-acid lower-alkyl ester under substantially solvent free conditions in the presence of a catalyst and an emulsifier, the process comprising:

an initial reaction stage which is carried out under such conditions that the reaction mixture in said initial stage is in steady-state, with continuous introduction of reactants comprising polyol and fatty-acid lower-alkyl ester, and continuous removal of products comprising reaction mixture having a degree of esterification of about 10% or more and volatile alcohol formed during the initial reaction stage, and

one or more subsequent reaction stages in which the reaction mixture from said initial stage is further reacted to said polyol fatty-acid polyesters;

wherein the conditions in the initial reaction stage aid in solubilizing the polyol.--

H2 cont

--118. A process for the synthesis of polyol fatty-acid polyesters by reacting a polyol and a fatty-acid lower-alkyl ester under substantially solvent free conditions in the presence of a catalyst and an emulsifier, the process comprising:

an initial reaction stage which is carried out under such conditions that the reaction mixture in said initial stage is in steady-state, with continuous introduction of reactants comprising polyol and fatty-acid lower-alkyl ester, and continuous removal of products comprising reaction mixture having a degree of esterification of about 10% or more and volatile alcohol formed during the initial reaction stage, and

one or more subsequent reaction stages in which the reaction mixture from said initial stage is further reacted to said polyol fatty-acid polyesters;